

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of the claims in the application.

In the claims:

1. (Currently Amended) A method for detecting in vitro ~~detection of malignant potential of human gastric carcinoma progressing from human gastric dysplasia~~, comprising ~~the steps of:~~
  - (a) ~~extraction~~ extracting of genomic DNA from ~~cells~~ a sample comprising human gastric dysplasia cells in a sample of tissue or body liquid;
  - (b) ~~detection~~ detecting the of methylation state of *p16* CpG islands in the genomic DNA ~~by amplification~~; and
  - (c) ~~determination~~ evaluating the risk of gastric carcinoma of malignant potential of the tested tissue or body liquid based upon the presence of methylated *p16* CpG islands.
2. (Currently Amended) The [[A]] method ~~for in vitro detection of malignant potential of dysplasia~~ of claim 1 wherein the methylation state of *p16* CpG islands is analyzed by methylation-specific PCR (MSP).
3. (Currently Amended) The [[A]] method ~~for in vitro detection of malignant potential of dysplasia~~ of claim 2 wherein methylated-sequence specific primers are complementary to any part of the artificial sequence SEQ ID NO: 1 or SEQ ID NO: 3, or wherein unmethylated-sequence specific primers are complementary to any part of the artificial sequence SEQ ID NO: 2 or SEQ ID NO: 4.
4. (Withdrawn) An artificial nucleotide having a sequence corresponding to the antisense sequence of methylated *p16* CpG islands of SEQ ID NO: 1.
5. (Withdrawn) An artificial nucleotide having a sequence corresponding to the antisense sequence

of unmethylated *p16* CpG islands of SEQ ID NO: 2.

6. (Withdrawn) An artificial nucleotide having a sequence corresponding to the sense sequence of methylated *p16* CpG islands of SEQ ID NO: 3.

7. (Withdrawn) An artificial nucleotide sequence corresponding to the sense sequence of unmethylated *p16* CpG islands of SEQ ID NO: 4.